

1 / 3 LGST (1 / 1) - ©LEGSTAT  
PN

-  
US 5852651 [US5852651]  
AP

-  
US 299159/94 19940831 [1994US-0299159]  
DT

-  
US-P  
ACT

-  
19940831 US/AE-A  
APPLICATION DATA (PATENT)  
US 299159/94 19940831 [1994US-0299159]

19970620 US/AS02  
ASSIGNMENT OF ASSIGNOR'S INTEREST  
ADC TELECOMMUNICATIONS, INC. 4900 WEST 78TH STREET BLOOMINGTON,  
MINNESOTA 55435 \*  
FISCHER, LARRY G. : 19970519; RATLIFF, CHARLES R. : 19970530; WALA, PHILIP M. :  
19970513

19981222 US/A  
PATENT

20010220 US/RF  
REISSUE APPLICATION FILED  
20001222

UP  
-  
2001-08

2 / 3 CRXX (1 / 1) - ©CLAIMS/RRX  
AN

-  
3089587  
PN

-  
5,852,651 A 19981222 [US5852651]  
PA

-  
ADC Telecommunications Inc  
PT

-  
E (Electrical)  
ACT

-  
20001222 REISSUE REQUESTED  
ISSUE DATE OF O.G.: 20010220  
REISSUE REQUEST NUMBER: 09/747273  
EXAMINATION GROUP RESPONSIBLE FOR REISSUEPROCESS: 2744

Reissue Patent Number:

UP

-

2001-08

UACT

-

2001-02-20

3 / 3 PAST (1 / 1) - ©PAST

AN

-

200108-001171

PN

-

5852651 A [US5852651]

DT

-

A (UTILITY)

OG

-

2001-02-20

CO

-

REA

ACT

-

REISSUE APPLICATION FILED

SH

-

REISSUE APPLICATION FILED

2/9/1

DIALOG(R) File 345:Inpadoc/Fam.& Legal Stat  
(c) 2001 EPO. All rts. reserv.

12118367

Basic Patent (No,Kind,Date): WO 9428690 A1 19941208 <No. of Patents: 012>

PATENT FAMILY:

AUSTRALIA (AU)

Patent (No,Kind,Date): AU 9470454 A1 19941220

CELLULAR RADIO SYSTEM WITH CENTRALIZED LOCATED BASE STATIONS AND  
DISTRIBUTED ANTENNA UNITS (English)

Patent Assignee: ADC TELECOMMUNICATIONS INC

Author (Inventor): RUSSELL DAVID S; FISCHER LARRY G; WALA PHILIP M;  
RATLIFF CHARLES R; BRENNAN JEFFREY

Priority (No,Kind,Date): US 68389 A 19930528; US 183221 A  
19940114; US 204660 A 19940302; WO 94US5897 W 19940525

Applic (No,Kind,Date): AU 9470454 A 19940525

IPC: \* H04Q-007/04; H04B-010/12

Derwent WPI Acc No: \* G 95-023214

Language of Document: English

BRAZIL (BR)

Patent (No,Kind,Date): BR 9406730 A 19970527

SISTEMA DE COMUNICACOES MICROCELULAR E PROCESSOS DE DESDOBRAMENTO  
ESCALONADO DE UM SISTEMA DE COMUNICACOES MICROCELULAR DIGITAL DE  
COMUTACAO PASSIVA E DE SETORIZACAO DA COBERTURA SOBRE UMA AREA DE  
COMUNICACOES CELULAR (Portugese)

Patent Assignee: ADC TELECOMMUNICATIONS INC (US)

Author (Inventor): RUSSELL DAVID S; FISCHER LARRY G; WALA PHILIP M;  
RATLIFF CHARLES R; BRENNAN JEFFREY

Priority (No,Kind,Date): US 68389 A 19930528; US 183221 A  
19940114; US 204660 A 19940302; WO 94US5897 W 19940525

Applic (No,Kind,Date): BR 94U6730 A 19940525

IPC: \* H04Q-007/04; H04B-010/12

Derwent WPI Acc No: \* G 95-023214

Language of Document: Portugese

CHINA (CN)

Patent (No,Kind,Date): CN 1127056 A 19960717

CELLULAR RADIO SYSTEM WITH CENTRALIZED LOCATED BASE STATIONS AND  
DISTRIBUTED ANTENNA UNITS (English)

Patent Assignee: ADC TELECOMMUNICATIONS INC (US)

Author (Inventor): RUSSELL DAVID S (US); FISCHER LARRY G (US);  
PHILIP M WALA (US)

Priority (No,Kind,Date): US 68389 A 19930528; US 183221 A  
19940114; US 204660 A 19940302

Applic (No,Kind,Date): CN 94192782 A 19940525

IPC: \* H04Q-007/22; H04B-010/12

Derwent WPI Acc No: \* G 95-023214

Language of Document: Chinese

Patent (No,Kind,Date): CN 1065402 B 20010502

CELLULAR RADIO SYSTEM AND METHOD FOR TRANSMISSION CELLULAR HONE TO  
ESTATE (English)

Patent Assignee: ADC TELECOMM INC (US)

Author (Inventor): RUSSELL D S (US); FISCHER L G (US); WALA P M  
(US)

Priority (No,Kind,Date): US 68389 A 19930528; US 183221 A  
19940114; US 204660 A 19940302

Applic (No,Kind,Date): CN 94192782 A 19940525

IPC: \* H04Q-007/22; H04B-010/12

Derwent WPI Acc No: \* G 95-023214

Language of Document: Chinese

JAPAN (JP)

Patent (No,Kind,Date): JP 8510878 T2 19961112

Priority (No,Kind,Date): WO 94US5897 W 19940525; US 68389 A  
19930528; US 183221 A 19940114; US 204660 A 19940302

Applic (No,Kind,Date): JP 94525837 A 19940525

IPC: \* H04Q-007/36; H04B-010/20  
Derwent WPI Acc No: \* G 95-023214  
Language of Document: Japanese

UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 5621786 A 19970415  
CELLULAR COMMUNICATIONS SYSTEM HAVING PASSIVE HANDOFF (English)  
Patent Assignee: ADC TELECOMMUNICATIONS INC (US)  
Author (Inventor): FISCHER LARRY G (US); WALA PHILIP M (US); BRENNAN  
JEFFREY (US)  
Priority (No,Kind,Date): US 294742 A 19940823; US 204660 A3  
19940302; US 183221 B2 19940114; US 68389 B2 19930528; US 946402  
B2 19920917; US 946964 B2 19920917; US 946931 B2 19920917; US  
946548 B2 19920917  
Applic (No,Kind,Date): US 294742 A 19940823  
National Class: \* 379060000; 379059000; 455033100; 455033200;  
455033300; 455033400; 370331000

IPC: \* H04Q-007/22  
Derwent WPI Acc No: \* G 95-023214  
Language of Document: English

Patent (No,Kind,Date): US 5627879 A 19970506  
CELLULAR COMMUNICATIONS SYSTEM WITH CENTRALIZED BASE STATIONS AND  
DISTRIBUTED ANTENNA UNITS (English)  
Patent Assignee: ADC TELECOMMUNICATIONS INC (US)  
Author (Inventor): RUSSELL DAVID S (US); FISCHER LARRY G (US); WALA  
PHILIP M (US); RATLIFF CHARLES R (US); BRENNAN JEFFREY (US)  
Priority (No,Kind,Date): US 204660 A 19940302; US 183221 B2  
19940114; US 68389 B2 19930528; US 946402 B2 19920917; US 946964  
B2 19920917; US 946931 B2 19920917; US 946548 B2 19920917  
Applic (No,Kind,Date): US 204660 A 19940302  
National Class: \* 379059000; 455033100; 455033200; 455033300;  
455033400; 379060000; 370328000

IPC: \* H04Q-007/22  
Derwent WPI Acc No: \* G 95-023214  
Language of Document: English

Patent (No,Kind,Date): US 5642405 A 19970624  
CELLULAR COMMUNICATIONS SYSTEM WITH CENTRALIZED BASE STATIONS AND  
DISTRIBUTED ANTENNA UNITS (English)  
Patent Assignee: ADC TELECOMMUNICATIONS INC (US)  
Author (Inventor): FISCHER LARRY G (US); WALA PHILIP M (US); BRENNAN  
JEFFREY (US)  
Priority (No,Kind,Date): US 298652 A 19940831; US 204660 A3  
19940302; US 183221 B2 19940114; US 68389 B2 19930528; US 946402  
B2 19920917; US 946964 B2 19920917; US 946931 B2 19920917; US  
946548 B2 19920917  
Applic (No,Kind,Date): US 298652 A 19940831  
Addnl Info: 5627879 Patented  
National Class: \* 379060000; 379059000; 455033100; 455033200;  
455033300; 455033400

IPC: \* H04Q-007/22  
Derwent WPI Acc No: \* G 95-023214  
Language of Document: English

Patent (No,Kind,Date): US 5644622 A 19970701  
CELLULAR COMMUNICATIONS SYSTEM WITH CENTRALIZED BASE STATIONS AND  
DISTRIBUTED ANTENNA UNITS (English)  
Patent Assignee: ADC TELECOMMUNICATIONS INC (US)  
Author (Inventor): RUSSELL DAVID S (US); FISCHER LARRY G (US)  
Priority (No,Kind,Date): US 409738 A 19950323; US 204660 A3  
19940302; US 183221 B2 19940114; US 68389 B2 19930528; US 946402  
B2 19920917; US 946964 B2 19920917; US 946931 B2 19920917; US  
946548 B2 19920917

Applic (No,Kind,Date): US 409738 A 19950323  
National Class: \* 455422000; 359173000; 359152000; 370338000  
IPC: \* H04Q-007/22

Derwent WPI Acc No: \* G 95-023214  
Language of Document: English

Patent (No,Kind,Date): US 5657374 A 19970812  
CELLULAR COMMUNICATIONS SYSTEM WITH CENTRALIZED BASE STATIONS AND  
DISTRIBUTED ANTENNA UNITS (English)

Patent Assignee: ADC TELECOMMUNICATIONS INC (US)  
 Author (Inventor): RUSSELL DAVID S (US); FISCHER LARRY G (US); WALA PHILIP M (US)  
 Priority (No,Kind,Date): US 410129 A 19950323; US 204660 A3 19940302; US 183221 B2 19940114; US 68389 B2 19930528; US 946402 B2 19920917; US 946964 B2 19920917; US 946931 B2 19920917; US 946548 B2 19920917  
 Applic (No,Kind,Date): US 410129 A 19950323  
 National Class: \* 370328000; 455422000  
 IPC: \* H04Q-007/22  
 Derwent WPI Acc No: \* G 95-023214  
 Language of Document: English  
 Patent (No,Kind,Date): US 5852651 A 19981222  
 CELLULAR COMMUNICATIONS SYSTEM WITH SECTORIZATION (English)  
 Patent Assignee: ADC TELECOMMUNICATIONS INC (US)  
 Author (Inventor): FISCHER LARRY G (US); RATLIFF CHARLES R (US); WALA PHILIP M (US)  
 Priority (No,Kind,Date): US 299159 A 19940831; US 204660 A3 19940302; US 183221 B2 19940114; US 68389 B2 19930528; US 946402 B2 19920917; US 946964 B2 19920917; US 946931 B2 19920917; US 946548 B2 19920917  
 Applic (No,Kind,Date): US 299159 A 19940831  
 Addnl Info: 5627879 Patented  
 National Class: \* 379056200; 455562000; 359152000  
 IPC: \* H04Q-007/30  
 Derwent WPI Acc No: \* G 95-023214  
 Language of Document: English

UNITED STATES OF AMERICA (US)

Legal Status (No,Type,Date,Code,Text):

US 5621786	P	19920917	US AA	PRIORITY
			US 946402 B2	19920917
US 5621786	P	19920917	US AA	PRIORITY
			US 946548 B2	19920917
US 5621786	P	19920917	US AA	PRIORITY
			US 946931 B2	19920917
US 5621786	P	19920917	US AA	PRIORITY
			US 946964 B2	19920917
US 5621786	P	19930528	US AA	PRIORITY
			US 68389 B2	19930528
US 5621786	P	19940114	US AA	PRIORITY
			US 183221 B2	19940114
US 5621786	P	19940302	US AA	PRIORITY
			US 204660 A3	19940302
US 5621786	P	19940823	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 294742 A	19940823
US 5621786	P	19970415	US A	PATENT
US 5621786	P	19971118	US CC	CERTIFICATE OF CORRECTION
US 5627879	P	19920917	US AA	PRIORITY
			US 946402 B2	19920917
US 5627879	P	19920917	US AA	PRIORITY
			US 946548 B2	19920917
US 5627879	P	19920917	US AA	PRIORITY
			US 946931 B2	19920917
US 5627879	P	19920917	US AA	PRIORITY
			US 946964 B2	19920917
US 5627879	P	19930528	US AA	PRIORITY
			US 68389 B2	19930528
US 5627879	P	19940114	US AA	PRIORITY
			US 183221 B2	19940114
US 5627879	P	19940302	US AE	APPLICATION DATA (PATENT)
			(APPL. DATA (PATENT))	
			US 204660 A	19940302
US 5627879	P	19940705	US AS02	ASSIGNMENT OF ASSIGNOR'S INTEREST
			ADC TELECOMMUNICATIONS 4900 WEST 78TH STREET	
			MINNEAPOLIS, MINNESOTA 55435 ; RUSSELL, DAVID	
			S. : 19940628; FISCHER, LARRY G. : 19940620;	

WALA, PHILIP M. : 19940620; RATLIFF, CHARLES  
R. : 19940523;

US 5627879	P	19970506	US A	PATENT
US 5642405	P	19920917	US AA	PRIORITY
		US 946402	B2	19920917
US 5642405	P	19920917	US AA	PRIORITY
		US 946548	B2	19920917
US 5642405	P	19920917	US AA	PRIORITY
		US 946931	B2	19920917
US 5642405	P	19920917	US AA	PRIORITY
		US 946964	B2	19920917
US 5642405	P	19930528	US AA	PRIORITY
		US 68389	B2	19930528
US 5642405	P	19940114	US AA	PRIORITY
		US 183221	B2	19940114
US 5642405	P	19940302	US AA	PRIORITY
		US 204660	A3	19940302
US 5642405	P	19940831	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 298652	A	19940831
US 5642405	P	19970624	US A	PATENT
US 5644622	P	19920917	US AA	PRIORITY
		US 946402	B2	19920917
US 5644622	P	19920917	US AA	PRIORITY
		US 946548	B2	19920917
US 5644622	P	19920917	US AA	PRIORITY
		US 946931	B2	19920917
US 5644622	P	19920917	US AA	PRIORITY
		US 946964	B2	19920917
US 5644622	P	19930528	US AA	PRIORITY
		US 68389	B2	19930528
US 5644622	P	19940114	US AA	PRIORITY
		US 183221	B2	19940114
US 5644622	P	19940302	US AA	PRIORITY
		US 204660	A3	19940302
US 5644622	P	19950323	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 409738	A	19950323
US 5644622	P	19970701	US A	PATENT
US 5657374	P	19920917	US AA	PRIORITY
		US 946402	B2	19920917
US 5657374	P	19920917	US AA	PRIORITY
		US 946548	B2	19920917
US 5657374	P	19920917	US AA	PRIORITY
		US 946931	B2	19920917
US 5657374	P	19920917	US AA	PRIORITY
		US 946964	B2	19920917
US 5657374	P	19930528	US AA	PRIORITY
		US 68389	B2	19930528
US 5657374	P	19940114	US AA	PRIORITY
		US 183221	B2	19940114
US 5657374	P	19940302	US AA	PRIORITY
		US 204660	A3	19940302
US 5657374	P	19950323	US AE	APPLICATION DATA (PATENT)
		(APPL. DATA (PATENT))		
		US 410129	A	19950323
US 5657374	P	19970812	US A	PATENT
US 5657374	P	19980630	US CC	CERTIFICATE OF CORRECTION
US 5852651	P	19920917	US AA	PRIORITY
		US 946402	B2	19920917
US 5852651	P	19920917	US AA	PRIORITY
		US 946548	B2	19920917
US 5852651	P	19920917	US AA	PRIORITY
		US 946931	B2	19920917
US 5852651	P	19920917	US AA	PRIORITY
		US 946964	B2	19920917
US 5852651	P	19930528	US AA	PRIORITY
		US 68389	B2	19930528
US 5852651	P	19940114	US AA	PRIORITY

			US 183221	B2	19940114	
US 5852651	P	19940302	US AA		PRIORITY	
			US 204660	A3	19940302	
US 5852651	P	19940831	US AE		APPLICATION DATA (PATENT)	
			(APPL. DATA (PATENT))			
			US 299159	A	19940831	
US 5852651	P	19970620	US AS02		ASSIGNMENT OF ASSIGNOR'S	
			INTEREST			
			ADC TELECOMMUNICATIONS, INC.		4900 WEST 78TH	
			STREET BLOOMINGTON, MINNESOTA		55435 ;	
			FISCHER, LARRY G. :		19970519; RATLIFF,	
			CHARLES R. :		19970530; WALA, PHILIP M. :	
			19970513			
US 5852651	P	19981222	US A		PATENT	
US 5852651	P	20010220	US RF		REISSUE APPLICATION FILED	
			(REISSUE APPL. FILED)			
			20001222			

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Patent (No,Kind,Date): WO 9428690 A1 19941208  
 CELLULAR RADIO SYSTEM WITH CENTRALIZED LOCATED BASE STATIONS AND  
 DISTRIBUTED ANTENNA UNITS (English)  
 Patent Assignee: ADC TELECOMMUNICATIONS INC (US); RUSSELL DAVID S  
 (US); FISCHER LARRY G (US); WALA PHILIP M (US); RATLIFF CHARLES R  
 (US); BRENNAN JEFFREY (US)  
 Author (Inventor): RUSSELL DAVID S (US); FISCHER LARRY G (US); WALA  
 PHILIP M (US); RATLIFF CHARLES R (US); BRENNAN JEFFREY (US)  
 Priority (No,Kind,Date): US 68389 A 19930528; US 183221 A  
 19940114; US 204660 A 19940302  
 Applic (No,Kind,Date): WO 94US5897 A 19940525  
 Designated States: (National) AT; AU; BB; BG; BR; BY; CA; CH; CN; CZ;  
 DE; DK; ES; FI; GB; GE; HU; JP; KG; KP; KR; KZ; LK; LU; LV; MD; MG;  
 MN; MW; NL; NO; NZ; PL; PT; RO; RU; SD; SE; SI; SK; TJ; TT; UA; UZ;  
 VN (Regional) AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LU; MC;  
 NL; PT; SE; BF; BJ; CG; CI; CM; GA; GN; ML; MR; NE; SN; TD; TG  
 Filing Details: WO 130000 With international search report; Before  
 expiration of time limit for amending the claims and to be  
 republished in the event of the receipt of the amendments  
 IPC: \* H04Q-007/04; H04B-010/12  
 Derwent WPI Acc No: \* G 95-023214; G 95-023214  
 Language of Document: English

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)

Legal Status (No,Type,Date,Code,Text):  
 WO 9428690 P 19930528 WO AA PRIORITY (PATENT)  
 US 68389 A 19930528  
 WO 9428690 P 19940114 WO AA PRIORITY (PATENT)  
 US 183221 A 19940114  
 WO 9428690 P 19940302 WO AA PRIORITY (PATENT)  
 US 204660 A 19940302  
 WO 9428690 P 19940525 WO AE APPLICATION DATA (APPL.  
 DATA)  
 WO 94US5897 A 19940525  
 WO 9428690 P 19941208 WO AK DESIGNATED STATES CITED IN A  
 PUBLISHED APPLICATION WITH SEARCH REPORT  
 (DESIGNATED STATES CITED IN A PUBLISHED APPL.  
 WITH SEARCH REPORT)  
 AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB  
 GE HU JP KG KP KR KZ LK LU LV MD MG MN MW NL  
 NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN  
 WO 9428690 P 19941208 WO AL DESIGNATED COUNTRIES FOR  
 REGIONAL PATENTS CITED IN A PUBLISHED  
 APPLICATION WITH SEARCH REPORT (DESIGNATED  
 COUNTRIES FOR REGIONAL PATENTS CITED IN A  
 PUBLISHED APPL. WITH SEARCH REPORT)  
 AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT  
 SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG  
 WO 9428690 P 19941208 WO A1 PUBLICATION OF THE  
 INTERNATIONAL APPLICATION WITH THE

INTERNATIONAL SEARCH REPORT (PUB. OF THE  
INTERNATIONAL APPL. WITH THE INTERNATIONAL  
SEARCH REPORT)

WO 9428690	P	19950216	WO DFPE	REQUEST FOR PRELIMINARY EXAMINATION FILED PRIOR TO EXPIRATION OF 19TH MONTH FROM PRIORITY DATE
WO 9428690	P	19950315	WO 121	EP: PCT APP. ART. 158 (1) (EP: PCT ANM. ART. 158 (1))
WO 9428690	P	19960314	DE 8642/REG	WITHDRAWAL (ZURUECKNAHME)
WO 9428690	P	19960904	WO 122	EP: PCT APP. NOT ENT. EUROP. PHASE (EP: PCT ANM. NICHT IN EUROP. PHASE EING.)
WO 9428690	P	19970128	WO NENP	NON-ENTRY INTO THE NATIONAL PHASE IN: CA



LEVEL 1 - 1 OF 1 PATENT

5,852,651

<=2> GET 1st DRAWING SHEET OF 58

Dec. 22, 1998

Cellular communications system with sectorization

REISSUE: Reissue Application filed Dec. 22, 2000 (O.G. Feb. 20, 2001) Ex. Gp.:  
2744; Re. S.N. 09/747,273

CORE TERMS: channel, antenna, station, digital, digitized, remote, receiver,  
zone, transmitter, cell...

**LEXIS-NEXIS**  
**Library: PATENT**  
**File: ALL**

Your search request has found no CASES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.

5852651 OR 5,852,651

**LEXIS-NEXIS**  
**Library: PATENT**  
**File: JNLS**

Your search request has found no ITEMS.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.

5852651 OR 5,852,651

**LEXIS-NEXIS**  
**Library: NEWS**  
**File: CURNWS**

Your search request has found no STORIES.

To edit the above request, use the arrow keys. Be sure to move the cursor to the end of the request before you enter it.

To enter a new search request, type it and press the ENTER key.

What you enter will be Search Level 1.

For further explanation, press the H key (for HELP) and then the ENTER key.